

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Modification, and shall be considered a supplement to the original Fact Sheet corresponding with the issuance of the initial Title V operating permit issued on February 14, 2006.

Permit Number: **R30-10700001-2003**

Application Received: **March 15, 2007**

Plant Identification Number: **107-00001**

Permittee: **E. I. du Pont de Nemours and Company, Inc.**

Facility Name: **Washington Works**

Manufacturing Unit: **Research and Development (Part 11 of 14)**

Mailing Address: **P. O. Box 1217, Washington, WV 26181**

Permit Action Number: MM02

Revised: August 14, 2007

Physical Location:	Washington, Wood County, West Virginia
UTM Coordinates:	442.368 km Easting • 4,346.679 km Northing • Zone 17
Directions:	Route 68 west from Parkersburg to intersection of Route 892. Continue west on Route 892 with the plant being on the north side about one mile from the intersection of Routes 68 and 892.

Facility Description

In the Research and Development (R&D) area, there are various pieces of small-scale process equipment, laboratories, and maintenance facilities. The majority of the laboratories conduct research or development work. However, the semi-works & PPL areas manufacture commercial product on a small scale. This permit only covers the portions of the Research and Development (R&D) Area which manufacture commercial product and does not include activities that are defined as research and development and are exempt from permitting under 45CSR30.

Emissions Summary

Permit R13-2654

There will be no changes in the emissions associated with the R13-2654 portion of this minor modification as the same emissions modeling was used for permit R13-2654 as was used to provide the emissions estimate for the fact sheet for the initial issuance of Research and Development Title V permit segment (R30-10700001-2003, Part 11 of 14).

Permit R13-2692

The following Table A enumerates the emissions of regulated air pollutants due to commercial operation, permitted under R13-2692.

Table A

Pollutant	Potential Emissions (tons/year)
Volatile Organic Compounds (VOC)	29.23
Ozone Depleting Compounds (ODC)	0.82
Particulate Matter (PM ₁₀)	0.18
Carbon Monoxide (CO)	0.04
Hazardous Air Pollutants (HAP)	4.288
Ammonium perfluorooctanoate (APFO)	0.0063 ^(a)

(a) – Equivalent to 12.6 pounds per year.

All of the emissions of the pollutants in Table A above, with the exception of APFO, are considered new (i.e., increases in) emissions resulting from permit R13-2692. This permitting action to incorporate R13-2692 is not a case in which an existing NSR permit is updated, neither is this permit action permitting for equipment which was previously “grandfathered” from permitting. Therefore, the Table A does not list any change in prior emissions (which is normally shown in a Fact Sheet for a permit modification when emissions change).

Unlike the other pollutants in Table A, the potential emissions amount of APFO given in Table A is not an increase above the stated capacity for the R&D-related emissions in the existing dispersion model. The sum of the research-related and commercial-related emissions will be constrained to the existing capacity of 12.6 pounds per year. In other words, there is no change in APFO emissions under this permitting action.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of criteria pollutants (CO, NO_x, PM, SO₂, and VOC), over 10 tons per year of a single Hazardous Air Pollutant (HAP), and over 25 tons per year of aggregated Hazardous Air Pollutants (HAPs). Due to this facility's potential to emit over 100 tons per year of criteria pollutants (CO, NO_x, PM, SO₂, and VOC), over 10 tons per year of a single Hazardous Air Pollutant (HAP), and over 25 tons per year of aggregated Hazardous Air Pollutants (HAPs), DuPont Washington Works is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modifications to this facility have been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Preconstruction permits for minor sources.
	45CSR30	Operating permit requirement.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

Active Permits/Consent Orders (associated with this minor modification only)

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2654	January 30, 2007	
R13-2692	April 30, 2007	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

Associated with Permit R13-2654

This minor modification was initiated in order to integrate into the Title V permit the requirements of Permit R13-2654, which provides closure efforts for the consent orders CO-R21-97-47 and CO-R27-92-19. Permit R13-2654 covers the sources and emissions of formaldehyde and methylene chloride which were not included in permit R13-2617B (already in the Title V permit). As stated above in the Emissions Summary, there will be no change in facility-wide PTE due to R13-2654. Emission Unit IDs R022S-002 through R217S-024 will be added to Section 1.0. in the permit (pp. 5-7). Also, a new section (6.0) will be added to the permit for the R13-2654 requirements. Permit R13-2654, condition 6.4.1. will be added to the citation for permit condition 3.4.1. since it is the same requirement.

Proposed permit conditions 6.1.3., and 6.1.4. have been edited to refer to Appendix B of the proposed permit, which is the most current version of Attachment A of permit R13-2617. Appendix B is used to determine which sources affected by the permit section 6.0 are also subject to either 45CSR21 or 45CSR27. The current version of this R13 permit is R13-2617B. But R13-2617B is in the process of being modified to revision C, which actually adds the list of sources in Appendix B of the proposed Title V permit. Once R13-2617C is issued, and this minor modification is reviewed by US EPA, the proposed Title V permit will be updated to the then current version R13-2617C.

Appendix B of the proposed permit does not contain certain emission points that are associated with permit R13-2654. These are emission points that begin with the letter “L”, which are associated with Central Labs area (Title V permit segment 13 of 14). Also not included are emission points that begin with the letter “P”, which belong to the Power and Services area (Title V permit segment 10 of 14).

Associated with Permit R13-2692

A second application was received from the permittee on May 7, 2007, to incorporate the requirements of permit R13-2692, which was issued on April 30, 2007. According to the engineering evaluation for R13-2692, the area affected by this permit is recognized as the Fluoropolymers Research Semiworks portion of the Research and Development (R&D) facility of Washington Works. Permit R13-2692 reflects changes necessary to allow for commercial operation of the Fluoroproducts Semiworks facility. Emission Unit IDs R022S204 through R029S231 will be added to Section 1.0. in the permit (pp. 7, 8). A new section (7.0) will be added to the permit for the R13-2692 requirements.

Proposed Title V permit conditions 7.4.4. and 7.4.5. both refer to Appendix C of the Title V permit. In the underlying requirements (R13-2692, 4.4.4. and 4.4.5.), Appendix A is referenced. The nomenclature was changed from “A” to “C” in the proposed permit conditions since the proposed permit already contained Appendices A and B.

Several sources with potential VOC emissions greater than 6 pounds per hour (pph) will now be used, intermittently, for commercial production as permitted by R13-2692. Reactors 1, 2, and 3 (Emission Unit IDs R022S210, R022S211, and R022S212) have potential VOC emissions of 7.8 pph and under R13-2692 can now be used for commercial production. RACT discussions were included in the application for R13-2692. It should be noted that Reactor 2 (R022S211) was listed on Attachment A of consent order CO-R21-97-47 which has been superseded by permit R13-2617B. Though Reactors 1 and 3 had potential VOC emissions greater than 6 pph they were not included in Attachment A because they were not used for any type of commercial production at that time or at any time until the present – with issuance of R13-2692. Since the reactors have potential VOC emissions greater than 6 pph, 45CSR§21-40 – “*Other Facilities that Emit Volatile Organic Compound (VOC)*,” will be removed from the permit shield list (existing permit condition 3.7.2.cc.).

Permit R13-2692, condition 4.4.1. will be added to the citation for existing permit condition 3.4.1. since it is the same requirement.

As discussed above for proposed permit conditions 6.1.3. and 6.1.4., proposed permit condition 7.1.8. has also been edited to refer to Appendix B of the proposed permit, which contains Attachment A of permit R13-2617C, which is in the modification process and is yet to be issued. This Appendix B is used to determine which sources affected by the permit section 7.0 are also subject to 45CSR21.

Non-Applicability Determinations

a. **R13-2654, Condition 6.1.5.**

Permit R13-2654, condition 6.1.5. prescribes the general manner in which the permittee is to install, maintain, and operate pollution control equipment listed in Section 1.0. of permit R13-2654. The same listing of sources and equipment in the NSR permit will also be listed in Section 1.0. of the Title V permit as part of this permitting action. It should be noted that Section 1.0. in permit R13-2654 does not list any pollution control devices. In fact, there are “None,” according to the listing. Therefore, the condition 6.1.5. is a superfluous requirement, and will not be included in the Title V permit under this permitting action.

b. **R13-2654, Conditions 6.4.2. and 6.4.3.**

Similar to the discussion above concerning the non-applicability of condition 6.1.5. of R13-2654, the conditions 6.4.2. and 6.4.3. are also for pollution control equipment in Section 1.0. of R13-2654. Since there is no pollution control equipment, these requirements are superfluous and will not be included in the Title V permit under this permitting action.

c. **R13-2692, Condition 4.1.7.**

This condition is used to limit fugitive emissions from storage structures associated with any manufacturing process that, pursuant to 45CSR§7-3.7., are required to have a full enclosure and be equipped with a particulate matter control device. The permittee has confirmed in technical correspondence (5/24/2007 e-mail) that the facility does not have any storage structures since all equipment is laboratory scale. Therefore it was determined that this particular requirement from R13-2692, 4.1.7., is not applicable, and as such, should not be included in the proposed Title V permit.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

All written comments should be addressed to the following individual and office:

Denton McDerment
Title V Permit Engineer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Denton McDerment
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1221 • Fax: 304/926-0479

Response to Comments (Statement of Basis)

No comments were received from the U.S. EPA.